Cupa conti can			U.S. NUCLEAR REG	ULATOR	COMM	SSION
NRC FORM 618 (8-2000) 10 CFR 71	CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES					
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2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.
- 3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION
 - a. ISSUED TO (Name and Address)
 Framatome ANP Richland, Inc.
 2101 Horn Rapids Road
 Richland, WA 99352-0130

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
Signers Power Corporation application
dated January 26, 2000, as supplemented.

4. CONDITIONS

5.

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

Packaging

- (1) Model No. ANF-250
- (2) Description

A uranium oxide powder/pellet shipping container. The packaging consists of a 16-gauge steel inner vessel, approximately 11-1/2 inches ID by 57 inches long, with a bolted and gasketed top flange closure and steel welded bottom plate. The inner vessel is centered and supported in a 22-1/2-inch ID by 68-3/8-inch long, 16-gauge steel drum by twelve 1/4-inch diameter spring steel rods welded to the inner vessel at the top and the bottom of the vessel. A 3/8-inch thick steel flange and a 16-gauge inner band position and support the top of the inner vessel within the outer container. The annulus between the inner vessel and outer container is filled with vermiculite.

The inner vessel is closed by six ½-inch square shank studs with hex head nuts at each end. The outer container is closed with a 12-gauge locking ring with drop forged lugs and a 5/8-inch diameter bolt and lock nut. A product container insert is positioned within the inner vessel.

The maximum gross weight of the packaging and contents is 616 pounds.

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(3) Drawings

- (i) The ANF-250 shipping container is constructed in accordance with Siemens Power Corporation Drawing No. EMF-306,175, Rev. 16.
- (ii) The pellet shipping suit case is constructed in accordance with Siemens Power Corporation Drawing No. EMF-304,306, Rev. 8.
- (iii) The powder and pellet product container inserts are constructed in accordance with Siemens Power Corporation Drawing No. EMF-306,176, Rev. 6, Sheets 1 and 2.

5.(b) Contents

- (1) Type and form of material
 - (i) Dry uranium exide powder enriched to a maximum 5.0 who in the U-235 isotope.
 - (ii) Dry utanium oxide pellets enriched to a maximum 5.0 w/o in the U-235 isotope.
 - (iii) Uranium oxide pelles enriched to a maximum of 1 w/o in the U-235 isotope.
 - (iv) Uranium oxide powder endched to a maximum of 1 w/o in the U-235 isotope.
- (2) Maximum quantity of material per package

Not to exceed 310 pounds and:

(i) For the contents described in 5(b)(1)(1):

The contents not to exceed the following:

Maximum Enrichment (wt% U-235)	Maximum Uranium Mass (kg U)	Maximum U-235 Mass <u>(kg U-235)</u>			
3.4	62.4	2.12			
3.8	41.0	1.56			
4.6	31.2	.1.44			
5.0	27.7	1.38			

Not to exceed a maximum mass of 1149 g H, considering all sources of hydrogenous material within the inner vessel. The contents must be contained in product container described in 5(a)(3)(iii).

NEO FORM 640			U.S. NUCLEAR REG	U.S. NUCLEAR REGULATORY COMMISSION				
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(ii) For the contents described in 5(b)(1)(ii):

The total contents not to exceed 120 kg U, with the U-235 content not to exceed 6 kg. Not to exceed a maximum mass of 1149 g H, including a maximum mass of 600 g polyethylene, considering all sources of hydrogenous material within the inner vessel. The contents must be contained in product container described in 5(a)(3)(ii).

(iii) For the contents described in 5(b)(1)(iii):

The total contents not to exceed 120 kg U, with the U-235 content not to exceed 1.2 kg. The contents must be contained in product container described in 5(a)(3)(ii).

(iv) For the contents described in 5(b)(1)(iv):

The total contents not to exceed 120 kg U, with the 4.235 content not to exceed 1.2 kg. The contents must be contained in product contained in 5(a)(3)(iii).

5.(c) Criticality Safety Index

Minimum criticality safety index to be shown on label for nuclear criticality control:

For contents described in 5(b)(1)(i) and limited in 5(b)(2)(i):

For contents described in 5(b)(1)(ii) and limited in 5(b)(2)(ii):

For contents described in 5(b)(1)(iii) and 5(b)(1)(iv), and limited in 5(b)(2)(iii) and 5(b)(2)(iv):

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- 6. In addition to the requirements of Subpart G of 10 CFR Part 71:
 - a. The package must be prepared for shipment and operated in accordance with the Operating Procedures in Chapter 7 of the application.
 - b. The packaging must meet the Acceptance Tests and Maintenance Program in Chapter 8 of the application.
- 7. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.
- 8. Expiration date: June 30, 2010.

U.S. NUCLEAR REGULATORY COMMISSION NRC FORM 618 **CERTIFICATE OF COMPLIANCE** (8-2000) 10 CFR 71 FOR RADIOACTIVE MATERIAL PACKAGES d. PACKAGE IDENTIFICATION NUMBER PAGES c. DOCKET NUMBER b. REVISION NUMBER CERTIFICATE NUMBER OF 71-9217 USA/9217/AF 13 9217

REFERENCES

Siemens Power Corporation application dated January 26, 2000.

Supplements dated: January 31, June 6, June 15 and September 29, 2000; February 6 and August 21, 2001; and December 16, 2004

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Robert Lewis, Chief

Licensing Section

Spent Fuel Project Office

Office of Nuclear Material Safety

and Safeguards

Date: 24 March 2005



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION REPORT
Docket No. 71-9217
Model No. ANF-250
Certificate of Compliance No. 9217
Revision No. 13

SUMMARY

By application dated December 16, 2004, Framatome ANP Richland, Inc. (Framatome), requested renewal to Certificate of Compliance No. 9217, for the Model No. ANF-250 package. Framatome also requested changes to the certificate for clarification purposes that did not affect the package design or authorized contents. The certificate has been renewed for a five year term.

EVALUATION

By application dated December 16, 2004, Framatome requested renewal to Certificate of Compliance No. 9217, for the Model No. ANF-250 package. Framatome also requested changes to the certificate for clarification purposes that did not affect the package design or authorized contents. The staff reviewed the documents referenced in the certificate and determined that the documentation was available and complete. The staff also reviewed the operating and maintenance procedures for the package and found them to be adequate.

Condition 5(b)(2)(I) was revised to indicate the correct product container reference of 5(a)(3)(iii) for dry uranium oxide powder enriched to a maximum of 5.0 wt.% ²³⁵U.

Condition 5(b)(2)(ii) was revised to indicate the correct product container reference of 5(a)(3)(ii) for dry uranium oxide pellets enriched to a maximum of 5.0 wt.% ²³⁵U.

Condition 5(b)(2)(iii) was revised to indicate the correct product container reference of 5(a)(3)(ii) for uranium oxide pellets enriched to a maximum of 1.0 wt.% ²³⁵U.

Condition 5(b)(2)(iv) was revised to indicate the correct product container reference of 5(a)(3)(iii) for uranium oxide powder enriched to a maximum of 1.0 wt.% ²³⁵U.

Condition 5(c) of the certificate was revised to replace the wording "Transport Index for Criticality Control" with "Criticality Safety Index" as defined in 10 CFR 71.4 that became effective on October 1, 2004 (69 FR 3698). In addition, the wording "transport index" was replaced with "criticality safety index" in all portions of this condition for clarity.

Condition 7 was revised to clarify that the package is approved for use under the general license provisions of 10 CFR 71.17. This change is due to a revision in the numbering of the sections in 10 CFR Part 71 that became effective on October 1, 2004 (69 FR 3698).

Condition 8 was changed to reflect the new expiration date of June 30, 2010.

The references section of the certificate indicating the dates of supplements was changed to add the December 16, 2004, request from Framatome.

CONCLUSION

The certificate has been renewed for a five year term that expires on June 30, 2010. This change does not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9217, Revision No. 13. on March 23, 2005.